



COMMONWEALTH of VIRGINIA

Department of Health DIVISION OF SHELLFISH SANITATION

109 Governor Street, Room 614-B
Richmond, VA 23219

Ph: 804-864-7487

Fax: 804-864-7481

Yeocomico River Growing Area # 007 Northumberland and Westmoreland Counties Shoreline Sanitary Survey

Date: 20 October 2008

Survey Period: July 14, 2008 – October 2, 2008

Total Number of Properties Surveyed: 1209

Surveyed By: D.R. Beuchelt

SECTION A: GENERAL

This survey area extends from Reference Point 7 at the end of Sandy Point at the end of Route 604 to Reference Point 8 at the end of Route 680 (extended to the shoreline), including the Potomac River and Yeocomico River shoreline between these two points, Parkers Creek, Northwest Yeocomico River [Shannon Branch, White Point Creek], West Yeocomico River [Long Cove, Kinsale Branch, Hampton Hall Branch, Wilkins Creek], South Yeocomico River [Mill Creek (Drum Cove), Lodge Creek (Dungan Cove), Palmer Cove, Cornish Creek], Thicket Point Bay, and all of their tributaries.

The topography in this area varies in elevation from 5' or less along the shoreline to a maximum of 120' near the western edge of the survey boundary. According to the Virginia Employment Commission, Northumberland showed an increase of 16.42% in population change from 1990 to 2000 while Westmoreland showed an increase of 7.12% during the same time period. The economy is based on retail trade, the seafood industry, recreation and agriculture.

During this survey period, meteorological data indicated that 12.4" of precipitation fell. Monthly totals were recorded at the Division's White Stone office. A monthly breakdown follows:

July 14-31	2.41"	August	4.06"	September	5.91"	October 1-2	0.02"
------------	-------	--------	-------	-----------	-------	-------------	-------

The following information was found on the <http://www.co.northumberland.va.us> web site.

The Northumberland County Board of Supervisors, in accordance with Section 54-16(B)5 (Chesapeake Bay Preservation Area Ordinance), has initiated a program requiring that all on-site sewage disposal systems (septic systems) be pumped out at least once every five (5) years. As alternatives to this pump-out requirement, septic system owners may elect to have an effluent filter installed in the outflow pipe from the septic tank or submit documentation, every five (5) years, from a licensed sewage handler explaining that the system has been inspected, is functioning properly, and does not need to be pumped out.

In implementing this program, efforts have been made to only notify the owners of property believed to contain an on-site sewage disposal system (septic system). Once initially contacted, septic system owners will be re-notified on a recurring basis (once every five years) regarding their need to comply with this program.

Information for Westmoreland County can be found on their web site at <http://www.co.westmoreland.va.us>.

This survey found a Sewage Treatment Facility in Callao, a campground at the Port Kinsale Marina, which the owners are closing, 4 on-site deficiencies, 25 possible pollution sites, 6 industrial sites, 3 solid waste sites, 22 boating activity sites, and 3 sites that involved animal wastes.

Copies for Bacteriological, Hydrographic and Shellfish Closure data are available at the area office for review. Copies of the current condemnation notices and maps are available via the internet at <http://www.vdh.virginia.gov/oehs/shellfish/>.

This report lists only those properties that have a sanitary deficiency or may have other environmental significance. ***DIRECT*** indicates that the significant activity or deficiency may have a direct impact on shellfish waters. Individual field forms with full information on properties listed in this report are on file in the Richmond office of the Division of Shellfish Sanitation and are available for reference until superseded by a subsequent survey of the area. Data in the report is also made available to local health departments and other agencies to address items that may be out of compliance with their regulatory programs.

SECTION B: SEWAGE POLLUTION SOURCES

SEWAGE TREATMENT FACILITIES

13. ***DIRECT*** -Callao Wastewater Treatment Plant, Lee Bowles, Class III Operator, 104 Harryhogan Road, Callao 22435. VPDES Permit # VA0091421. Discharge # 001. This plant has replaced the lagoons (VPDES Permit # VA0020885). This is a Municipal Minor type facility approved for a design flow of 60,000 GPD and with an outfall of 17,000 GPD. An UV treatment system is used for disinfection. Liquid sludge is removed from the tank when the tank is 80% full. The liquid sludge is transferred to the Reedville WWTP (also operated by Mr. Bowles) where it is applied to the sludge drying beds. The receiving stream is UT Lodge Creek on water body VAP-A33E. A copy of the most recent OWP/DEQ inspection report is on file with this report in the Division of Shellfish Sanitation Richmond office.

ON-SITE DEFICIENCIES

23. CONTRIBUTES POLLUTION – 1714 Mundy Point Rd., Callao 22435. Dwelling – 1 story white cinder block, light gray shingles. 9 persons. Failing septic system. Effluent is pooling onto ground surface. Occupant states that the system has been pumped out 3 times in the last month. Sanitary Notice issued on August 8, 2008 to Field # 461. Tax Map # 2 (1) 63.

29. NO FACILITIES – 111 Gardy's Mill Rd., Kinsale. Dwelling – 1 story, white with green shingles. 2 persons. Occupants are currently using facilities at a relative's house next door. Sanitary Notice issued on August 19, 2008 to Field # 620. Tax Map # 55 92B.
53. CONTRIBUTES POLLUTION – 222 Shore Lane, Kinsale 22488. Dwelling – 1 story, white with gray shingles and green shutters. No Contact. Effluent is pooling onto ground surface from the septic system. A neighbor entered the property and found a malfunctioning toilet to blame. The water was switched off. Effluent never reached the watershed. Sanitary Notice issued on September 17, 2008 to Field # 1047. Tax Map # unknown.
60. CONTRIBUTES POLLUTION – (Kitchen or Laundry Wastes) – 3436 Skipjack Rd. Sandy Point 22577. 2 story white asbestos with green trim and green shingles. No Contact. Broken lid on grease trap. No sign of malfunction. Sanitary Notice issued on October 1, 2008 to Field # 1192. Tax Map # 50A-1-1-8.

POTENTIAL POLLUTION

1. Location: 36 Riverview Lane, Lottsburg 22511. Dwelling – 1 story blue cinderblock with dark blue shutters and gray shingles. No Contact. 1 ½ "PVC pipe open to ground. No signs of effluent.
4. Location: Adjacent to 295 Barn Rd., Lottsburg 22511. Possibly new building site. No Contact. A large gazebo and Port-a-john found on-site.
7. Location: 281 Sandpiper Circle, Lottsburg 22511. Dwelling – 1 story brick with white trim and brown shingles. No Contact. Area in yard covered with a grate. Possible storm drain.
8. Location: Adjacent to 57 Sandpiper Circle, Lottsburg. Dwelling – 1 story with light brown shingles. No Contact. Garden hose exits a shed and runs to a hedge row of bushes. No evidence of discharge at time of survey.
9. Location: 1216 Melrose Rd., Lottsburg 22511. Dwelling – 1 ½ brick and yellow siding with brown shingles and green shutters. No Contact. Area in yard covered with wooden pallet. Unable to determine origin.
11. Location: 1015 Northumberland Hwy, Callao 22435. Dwelling – mobile home, variegated brown with brown shutters. No Contact. Debris and old building materials scattered on premises.
15. Location: 1274 Lodge Landing Rd., Callao 22435. Dwelling – 1 story, white cinderblock with light green shutters. For sale/vacant. Area over drainfield shows tall, dark green grass. No signs of malfunction.
21. Location: 3151 Harryhogan Rd., Callao 22435. Dwelling – 2 story, white with metal roof. No Contact. Area in yard shows dark green grass leading to the bulkhead. Work has recently been done at the bulkhead.
22. Location: 361 Rock Ln., Callao 22435. Dwelling – 1 story, light gray-wood siding with gray shingles and white trim. No Contact. Two white pvc pipes found. One exits the house and another drains into a ditch. No evidence of discharge at time of survey.

25. Location: 977 Hatches Ave., Callao 22435. Dwelling – 1 story, white, with green shingles and with a large gray-colored shed on-site. No Contact. A metal pipe exits the shed. No evidence of discharge at time of survey.
26. Location: 485 Mundy Point Rd., Callao 22435. Dwelling – 2 story, white with gray shingles, under renovation. No Contact. 1 ½ - 2" white pipe exits the house. No evidence of discharge at time of survey.
32. Location: 532 Kinsale Rd., Kinsale 22488. Dwelling – 2 story, yellow with green shutters and green metal roof. No Contact. 2 inch white pvc pipe exits house. No evidence of discharge at time of survey.
36. Location: 1104 Kinsale Rd., Kinsale 22488. Dwelling – 1 story, white with green shutters and awnings and gray shingles. No Contact. 1 ½ inch white pvc pipe exits house. No evidence of discharge at time of survey.
37. Location: 528 Bancton Rd., Kinsale 22488. Dwelling – mobile home, white with an "A" roof and black shutters. No Contact. A letter written in August 2007, by adjacent property owners to the county of Westmoreland, states that this property had been used as a personal dumping ground. Found at the site were tires, an old mattress and old lumber.
41. Location: 580 Jackson Lane, Kinsale 22488. Dwelling – mobile home with an enclosure and addition, gray with white trim and white skirting and lt. gray shingles. No Contact. 2 inch white pvc pipe exits shed. No evidence of discharge at time of survey.
42. Location: 911 address and owner unknown. No Contact. Evidence supports a possible campsite. No occupancy at time of survey.
43. Location: 2409 Sandy Pt. Rd., Kinsale 22488. 3 persons. Occupant states that there is no bathroom at the property; however, there is a septic system on-site. Although a notice was not issued, local authorities have been notified to check the property.
45. Location: 1501 Sandy Pt. Rd., Sandy Point 22577. Dwelling – mobile home, cream-colored with brown trim. 1 person. Trash is scattered on premises adjacent to the privy.
46. Location: 418 Rosa Bran Rd., Sandy Point 22577. Dwelling – 1 story, pale yellow with black shingles and black shutters. No Contact. Remnants of an old pipe leading to a ditch are still visible. No evidence of discharge at time of survey.
47. Location: 329 Rosa Bran Rd., Sandy Point 22577. Dwelling – 1 story, green siding with white trim and black shingles. Vacant. Area of ground disturbed around concrete tank. No evidence of malfunction at time of survey.
52. Location: 92 Shore Lane, Kinsale 22488. Dwelling – 2 story white siding with gray shingles. No Contact. Green garden hose runs under bushes around house, origin unknown.
56. Location: 116 Washington Circle, Kinsale 22488. Dwelling – 1 story, gray with white trim and gray shingles. 1 person. Area over drainfield shows dark grass. No evidence of malfunction at time of survey.

57. Location: 654 Springfield Bch. Rd., Kinsale 22488. Dwelling – 1 story, tan asbestos shingles siding, with green shutters and brown shingles. No Contact. 2” white pvc pipe exits house and runs to ground surface. No evidence of discharge at time of survey.
58. Location: 2966 Skipjack Rd., Sandy Point 22577. Dwelling – 1 story, yellow siding, white trim with brown shingles. No Contact. Origin is unknown of green garden hose exiting from under the house. No evidence of discharge at time of survey.
59. Location: 3274 Skipjack Rd., Sandy Point 22577. Dwelling - 1 story, white asbestos siding with dark (blue/black) shutters and Lt. gray shingles. No Contact. Area in yard, concrete (with picnic table setting on top) is covered with a sheet of metal. Possible septic tank. No evidence of malfunction at time of survey.

SECTION C: NONSEWAGE WASTE SITES

INDUSTRIAL WASTES

12. Silco Truck Service, Inc., 137 Movie Hall Lane, Callao. Owner: David J. Silmerman, PO Box 1010, Callao. Business - Truck and Auto Repair. Observed on-site were 2x400 gallons and 2x1000 gallons of used motor oil, without berms. Oil is used to heat the building.
24. ***DIRECT*** – Pride of Virginia, Owner: C.W. O’Bier & Sons, Inc., 2980 Mundy Point Rd., Callao 22435. Business – common carrier trucking company. 15 employees. Processing and washdown wastes discharge into the Yeocomico River (Permit # VAG524021). Also observed on-site were a 1x100 gallon unleaded fuel tank and a 1x2000 gallon diesel fuel tank, both without berms.
39. ***DIRECT*** – Harper Seafood Incorporated, 1470 White Point Rd., Kinsale 22488. Owner: Mrs. Robert H. Harper, 1348 White Point Rd., Kinsale 22488. Business – shucker packer, VA 412SP. Plant closed. Processing and washdown wastes discharge into the Yeocomico River (Permit # VAG524036). Also observed on-site were 2x1000 gallon gasoline fuel tank and a 1x500 gallon diesel fuel tank, both with berms.
49. ***DIRECT*** – Bevan Oyster Company, Inc., 1090 Skipjack Rd., Kinsale 22488. Owner: Ronnie Bevans, PO Box 340, Kinsale. Business – shucker packer, VA 303SP. 100 employees. Processing and washdown wastes discharge into the NW Yeocomico River (Permit # VAG524026) at three locations, Field #1027-Bevans and Field #1027A-Frozen Half-shell and Field #1028-Bay Shellstock.
50. ***DIRECT*** – Bay Shellstock, 1090 Skipjack Rd., Kinsale 22488. Owner: Ronnie Bevans, PO Box 340, Kinsale. Business – shellstock shipper, VA 724SS. 6 employees. Processing and washdown wastes discharge into the NW Yeocomico River (Permit # VAG524026).
61. ***DIRECT*** – James E. Headley Oyster Company, Inc., 565 Gardy’s Mill Rd., Callao 22435. Owner: James E. Headley. Business – shucker packer, VA 685SP. 20 employees. Processing and washdown wastes discharge into Gardy’s Millpond and empties into Hampton Hall Creek located on West Yeocomico River (Permit # VAG524067). NOTE: This plant is located outside of the boundary line. However, the processing wastes eventually flow into the Yeocomico River.

62. George Noblett Oil, Inc., 13866 Cople Highway, Kinsale 22488. Owner: Noblett Oil & Propane, PO Box 426, Kilmarnock 22482. Business – bulk oil distributor. 3 employees. Present at time of survey were 2x19281 gallons of heating oil, 1x14500 gallons of kerosene, 1x15361 gallons of diesel, 1x11720 gallons gasoline, 1x15500 gallons gasoline and 1x19281 gallons of kerosene. Also on-site are 104x50 gallon drums of motor oil, gear oil and hydraulic fluid. The tanks and drums have no berms. This site has a retention pond with a spill detention plan.

SOLID WASTE SITES

30. Location: 13302 Cople Highway, Kinsale 22488, Tidewater Machine and Marine. Approximately ½ acre of scrap metal, tires, cars, trucks and other debris.
43. Location: 2409 Sandy Point Rd., Kinsale 22488. Trash is scattered on premises.
48. Location: Adjacent to 922 Skipjack Rd., Kinsale 22488. Yard debris, old construction materials, and old telephone poles dumped on-site.

SECTION D: BOATING ACTIVITY

MARINAS

10. Olverson's Marina, 1161 Melrose Rd. Callao 22435, P.O. Box D, Callao. Owner: Lodge Creek Marina, Inc., Commercial marina. 4 employees. Available on-site are 199 seasonal slips/moorings, 8 transient slips/moorings, 2 live aboard, 19 dry storage spaces, fuel (2x4000 gallon unleaded and 1x4000 gallon diesel fuel tanks with concrete berms), electricity, water, solid waste containers, restrooms, dump station and sewage holding tank pumpout facilities. Facility No. 794.
18. Krentz Marine Railway, 3048 Harryhogan Rd., Callao 22435. Manager: Douglas Daiss. Commercial marina. Available on-site are 33 seasonal slips/moorings, ramp, electricity, repair service, water, solid waste cans, restrooms and dump station facilities. Facility No. 778.
19. Boat Yard at Harryhogan, 3183 Harryhogan Rd., Callao 22435. Manager: Douglass Daiss. Boat yard and marina. 4 employees. Available on-site are 12 transient slips/moorings, 4 dry storage spaces, electricity, repair service, water, solid waste cans, restrooms and dump station facilities.. Facility No. 828.
34. Kinsale Harbour Marina, 285 Kinsale Rd., Kinsale 22488. Owner: Kinsale Harbour Marina LLC, PO Box 189, Kinsale. Commercial marina. Available on-site are 82 seasonal slips/moorings, 10 transient slips/moorings, ramp, electricity, water, solid waste cans, restrooms, dump station and sewage holding tank pumpout facilities. Facility No. 1047.
38. Port Kinsale Marina, 413 Allen Point Rd., Kinsale 22488. Manager: Charlie Santangelo, PO Box 280, Kinsale. Commercial marina. 10 employees. Available on-site are 73 seasonal slips/moorings, 20 transient slips/moorings, 46 dry storage spaces, fuel (1x1000 gallon unleaded gasoline and 1x500 gallon diesel, both with berms), ramp, electricity, repair service, water, solid waste cans, restrooms, dump station and sewage holding tank pumpout facilities. Facility No. 1087.

40. White Point Marina, 175 Marina Drive, Kinsale 22488. Owner: R.H. Redfearn, Jr. Commercial marina. 6 employees. Available on-site are 44 seasonal slips/moorings, 5 transient slips/moorings, fuel, small boat ramp under construction, electricity, repair service, water, solid waste cans, restrooms, dump station and sewage holding tank pumpout facilities. Facility No. 1083.
49. Bevans Oyster Company, Inc, 1090 Skipjack Rd., Kinsale 22488. Owner: Ronnie Bevans, PO Box 340, Kinsale. Seafood facility. 100 employees. Available on-site are 7 slips/moorings, fuel, solid waste cans, restrooms and dump station facilities. Facility No. 1022.
51. Sandy Point Marina, 1276 Skipjack Rd., Sandy Point 22577. Owner: Laura Mae Jenkins, PO Box 35, Sandy Point. Commercial marina. 1 employee. Available on-site are 50 seasonal slips/moorings, 16 dry storage spaces, fuel, ramp, electricity, repair service, water, solid waste cans, restrooms, dump station and sewage holding tank pumpout facilities. Facility No. 1070.
55. Shannon Branch Marine Service, located on Route 1403, Kinsale 22488. Owner: Paul V. Fleury, 900 Swann Creek Road, C-9, Fort Washington, 07448. Manager: Howard Smith. Boat repair. 1 employee. Available on-site are 8 seasonal slips/moorings, electricity, repair service, solid waste cans, restrooms (vault privy), dump station and sewage holding tank pumpout facilities. Sewage disposal is by pump and haul contractor. Facility No. 1072.

OTHER PLACES WHERE BOATS ARE MOORED

-None-

UNDER SURVEILLANCE

2. Northumberland Shores Civic Association, adjacent to 1433 Shore Lane, Callao 22435. Manager: Lewis Lanham. Community ramp. Available on-site is 1 seasonal slip/mooring. Other services available are an in-out ramp and water. Facility No. 793.
3. John Barden Memorial Fishing Pier, adjacent to 1245 and 1287 Shore Lane, Callao 22435. Available on-site is a fishing pier for residents of Northumberland Shores. The pier can accommodate loading and unloading boats.
5. Bon Harbours, located on Cornish Creek Dr., Lottsburg 22511. Boat ramp. At time of survey one boat was moored, 1 small boat stored inside a steel carport. 3 boats and 6 boat trailers in dry storage. Facility No. 740.
6. Location: Adjacent to 281 Sandpiper Circle, Lottsburg 22511. Community boat ramp.
16. Lodge Creek Boat Landing, Located on the end of Lodge Rd. Manager: Virginia DG&IF, 4010 W. Broad Street, Richmond 23230. Public boat ramp. Available on-site are 3 seasonal slips/moorings. Facility No. 1259.
20. The Fishing Center, 3155 Harryhogan Rd., Callao 22435. Manager: Bob Stoner, PO Box 389, Callao. Private boat mooring facility. Available on-site are 17 seasonal slips/moorings and restroom facilities. Facility No. 818.
28. Gardy's Mill Pond, Located on Gardy's Mill Rd., Kinsale 22488. Public boat ramp and dock. Fishing and boating activities on public pond. This pond feeds into the Hampton Hall Branch of the Yeocomico River.

- 31. Location: Adjacent to 62 Sigourney Dr., Community boat ramp. Four private docks are within vicinity.
- 33. Southern States Cooperative Inc., 82 Steamboat Landing, Kinsale 22488. Manager: Ken Beauchamp. PO Box 29, Kinsale 22488. Granary and loading dock. 4 employees. Available on-site are 2 moorings, electricity, water, and restroom facilities. Facility No. 1074.
- 35. Location: End of Pier Place, Kinsale 22488. Community Dock. At time of survey, 3 boats were moored.
- 39. Harper Seafood Company, Inc., 1348 White Point Rd., Kinsale 22488. Owner: Mrs. Robert Harper. Dock used for loading and unloading workboats. No permanent slips/moorings. Electricity is on-site. Facility No. 1038.
- 44. Location: On Holly Circle, Sandy Point 22577. Community ramp and dock.
- 54. Shannon Park Community Pier. Located on Shore Lane adjacent to Shannon Branch Marine Service. Kinsale 22488. Manager: Bruce Sannino. Available on-site are 2 seasonal slips/moorings, ramp, a parking area and a picnic area. Facility No. 1073.

SECTION E: CONTRIBUTES ANIMAL POLLUTION

- 14. Location: 412 Gravel Pit Farm, Callao 22435. Dwelling – 1 ½ story cream-colored siding with black shingles and white trim. No Contact. At time of survey 4 horses were in the pasture. Pasture leads to a ravine. Manure disposal unknown.
- 17. Location: 2870 Harryhogan Rd., Callao 22435. Dwelling – 1 story brick with gray shingles. 3 persons. At time of survey were 17 dogs. Wastes on ground surface close to a ravine leading into Lodge Creek.
- 27. ***DIRECT*** - Location: 3411 Hampton Hall Highway, Callao 22435. Dwelling – 1 story white siding. 3 persons. Present at time of survey were 1 goat, 1 mule, 5 geese and 1 duck with access to Hampton Hall Creek. Wastes were left on ground surface.

SUMMARY

Area # 007
Yeocomico River
20 October 2008

SECTION B: SEWAGE POLLUTION SOURCES

1. SEWAGE TREATMENT FACILITIES

1 – DIRECT – # 13
0 – INDIRECT – None
1 – B.1.TOTAL

2. ON-SITE SEWAGE DEFICIENCIES – Correction of deficiencies in this section is the responsibility of the local health department.

0 – CONTRIBUTES POLLUTION, DIRECT – None
2 – CONTRIBUTES POLLUTION, INDIRECT – # 23, 53
0 – CP (Kitchen or Laundry Wastes), DIRECT – None
1 – CP (Kitchen or Laundry Wastes), INDIRECT – # 60
0 – NO FACILITIES, DIRECT – None
1 – NO FACILITIES, INDIRECT – # 29
4 – B.2.TOTAL

3. POTENTIAL POLLUTION – Periodic surveillance of these properties will be maintained to determine any status change.

25 – POTENTIAL POLLUTION – # 1, 4, 7, 8, 9, 11, 15, 21, 22, 25, 26, 32, 36, 37, 41, 42, 43, 45, 46, 47, 52, 56, 57, 58, 59

SECTION C: NON-SEWAGE WASTE SITES

1. INDUSTRIAL WASTE SITES

5 – DIRECT – # 24, 39, 49, 50, 61
3 – INDIRECT – # 12, 62, 63
8 – C.1.TOTAL

2. SOLID WASTE DUMPSITES

0 – DIRECT – None
3 – INDIRECT – # 30, 43, 48
3 – C.2.TOTAL

SECTION D: BOATING ACTIVITY

9 – MARINAS – # 10, 18, 19, 34, 38, 40, 49, 51, 55
0 – OTHER PLACES WHERE BOATS ARE MOORED – None
13 – UNDER SURVEILLANCE – # 2, 3, 5, 6, 16, 20, 28, 31, 33, 35, 39, 44, 54
22

SECTION E: CONTRIBUTES ANIMAL POLLUTION

1 – DIRECT – # 27
2 – INDIRECT – # 14, 17
3 – E. TOTAL

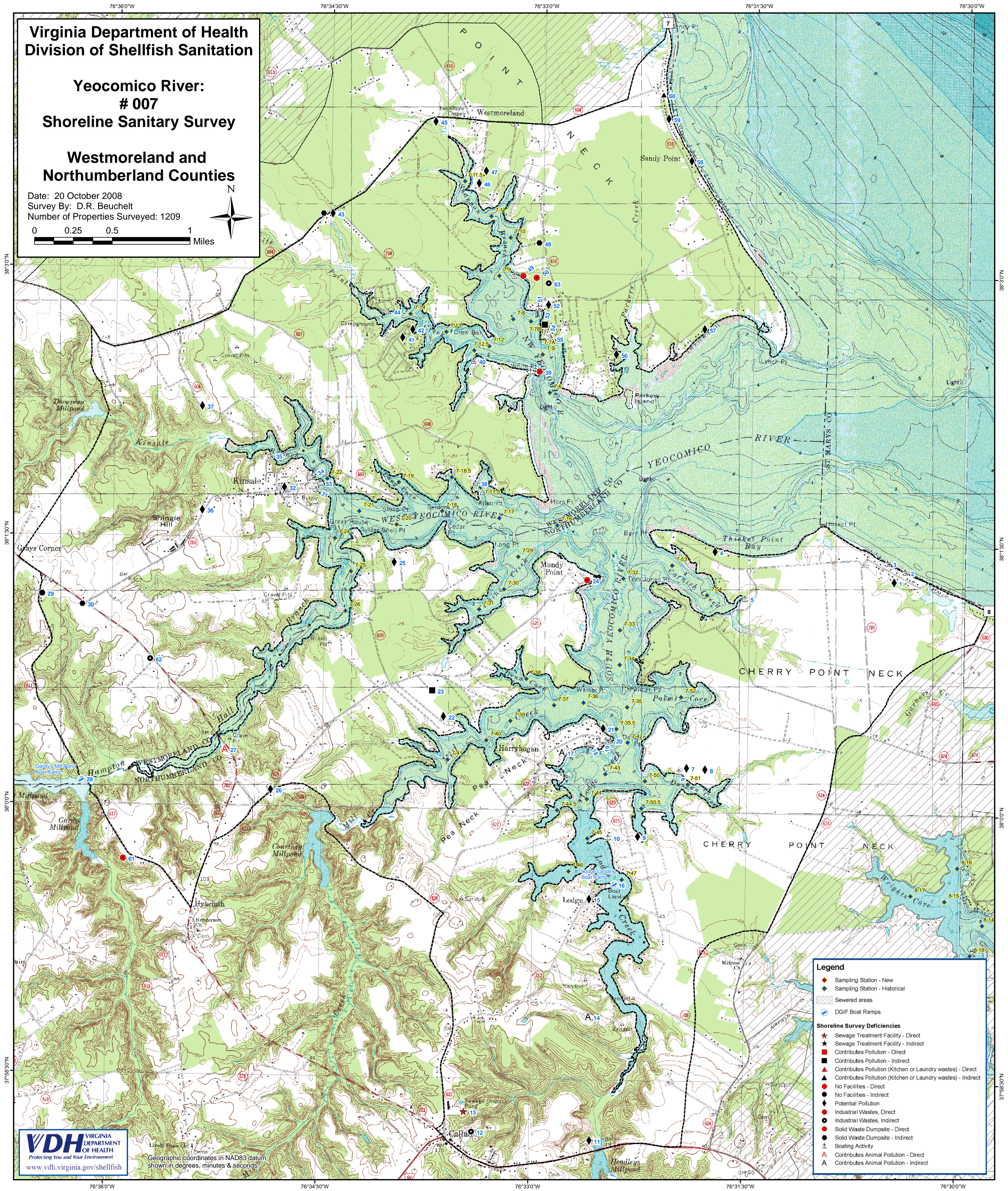
Virginia Department of Health
Division of Shellfish Sanitation

Yeocomico River:
007
Shoreline Sanitary Survey

Westmoreland and
Northumberland Counties

Date: 20 October 2008
Survey By: D.R. Beuchelt
Number of Properties Surveyed: 1209

0 0.25 0.5 1 Miles



Legend

- Sampling Station - New
- Sampling Station - Historical
- Sewered areas
- DGIF Boat Ramps
- Shoreline Survey Deficiencies**
 - Sewage Treatment Facility - Direct
 - Sewage Treatment Facility - Indirect
 - Contributes Pollution - Direct
 - Contributes Pollution - Indirect
 - Contributes Pollution (Kitchen or Laundry wastes) - Direct
 - Contributes Pollution (Kitchen or Laundry wastes) - Indirect
 - No Facilities - Direct
 - No Facilities - Indirect
 - Potential Pollution
 - Industrial Wastes, Direct
 - Industrial Wastes, Indirect
 - Solid Waste Dumpsite - Direct
 - Solid Waste Dumpsite - Indirect
 - Boating Activity
 - Contributes Animal Pollution - Direct
 - Contributes Animal Pollution - Indirect